UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,689	10/07/2003	Ernst B. Riemann	0002792.0002	3566

7590	06/01/2006		EXAMINER

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ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	10/679,689	RIEMANN ET AL.
	Examiner	Art Unit
	Toan D. Nguyen	2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>15 March 2006</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>23-30 and 32-39</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>23-30 and 32</u> is/are allowed.

6)☒ Claim(s) <u>33-39</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>07 October 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3/6/06</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Specification

1.   The disclosure is objected to because of the following informalities: page 6 line 1,

it is suggested to change "the came set" to --- the same set ---.

Appropriate correction is required.

Claim Objections

2.   Claims 32 and 36 are objected to because of the following informalities:

In claim 32 line 2, it is suggested to change "a synchronous-to-asynchronous

converter" to --- said synchronous-to-asynchronous converter ---.

In claim 36 line 8, it is suggested to change "telephone interface means" to ---

said telephone interface means ---.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

5.   Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Deng (US 5,862,134) in view of Murai (US 6,208,639).

For claim 33, Deng discloses single-wiring network for integrated voice and data

communications comprising:

a plurality of telephone means (figure 1, references 17, 18 and 19, col. 2 lines 21-

22);

an external interface means (figure 1, reference 11) for coupling said computer

data computer network (figure 1, references 18 and 19) to at least one outside trunk line

of a public switched telephone network (PSTN) (figure 1, reference 14), wherein said

external interface means translates telephony transmissions from the PSTN (figure 1,

reference 14), to data for transmission over said computer data computer network (col.

2 lines 40-45 and col. 2 lines 60-62);

software means for said computer data computer network, said software means

comprising first means for performing the functions of a private branch exchange (PBX)

(figure 1, reference 12) for said plurality of telephone means (figure 1, references 17, 18

and 19) that are connected to the computer data computer network (col. 4 line 57 to col.

5 line 7);

said software means comprising second means for receiving requests for service over said computer data computer network for any of said plurality of telephones (figure 1, references 17, 18 and 19) means (col. 3 lines 58-60); and

said software means comprising fourth means for establishing bi-directional media streams (figure 3, reference steps 305 and 307, col. 4 lines 4-7 and col. 4 lines 10-13) over said computer data computer network between any one of said plurality of telephone means (figure 1, references 17, 18 and 19) and said interface (figure 1, reference 11) to said PSTN (figure 1, reference 14) upon receiving a request over said computer network for an outside line for said one of said plurality of telephone means (figure 3, reference steps 301 and 302, col. 3 lines 58-63).

However, Deng does not expressly disclose said software means comprising third means for establishing bi-directional media streams over said computer data computer network between any two of said telephone means upon receiving a request over said computer data computer network for calling one of said plurality of telephone means from another of said plurality of telephone means. In an analogous art, Murai discloses said software means comprising third means for establishing bi-directional media streams (col. 9 lines 24-25) over said computer data computer network (figure 1, reference 16) between any two of said telephone means upon receiving a request over said computer data computer network for calling one of said plurality of telephone means (figure 3, reference 50) from another (figure 2, reference 14a) of said plurality of telephone means (col. 7 lines 43-47).

One skilled in the art would have recognized said software means comprising third means for establishing bi-directional media streams over said computer data computer network between any two of said telephone means upon receiving a request over said computer data computer network for calling one of said plurality of telephone means from another of said plurality of telephone means, and would have applied Murai's operation in Deng's operational step by TCI 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Murai's computer network system with telephone function in Deng's single-wiring network for integrated voice and data communications with the motivation being provide the case where a call is originated to the telephone set 14a connected to the ISDN extension line from any of the computer terminals connected to the LANs 42a and 42b, and audio communication is performed there between (col. 7 lines 43-47).

For claim 34, Deng discloses single-wiring network for integrated voice and data communications comprising:

a plurality of telephone means (figure 1, references 17, 18 and 19, col. 2 lines 21-22);

an external interface means (figure 1, reference 11) for coupling said computer data computer network (figure 1, references 18 and 19) to at least one outside trunk line of a public switched telephone network (PSTN) (figure 1, reference 14), wherein said external interface means translates telephony transmissions from the PSTN (figure 1, reference 14), to data for transmission over said computer data computer network (col. 2 lines 40-45 and col. 2 lines 60-62);

software means for said computer data computer network, said software means

comprising first means for performing the functions of a private branch exchange (PBX)

(figure 1, reference 12) for said plurality of telephone means (figure 1, references 17, 18

and 19) that are connected to the computer data computer network (col. 4 line 57 to col.

5 line 7);

said software means comprising second means for receiving requests for service

over said computer data computer network for any of said plurality of telephones means

(figure 1, references 17, 18 and 19)(col. 3 lines 58-60); and

said interface (figure 1, reference 11) to said PSTN (figure 1, reference 14) upon

receiving a request over said computer network for an outside line for said one of said

plurality of telephone means (figure 3, reference steps 301 and 302, col. 3 lines 58-63).

However, Deng does not expressly disclose said software means comprising

third means for establishing bi-directional media stream over said computer data

computer network between any one of said plurality of telephone means. In an

analogous art, Murai discloses said software means comprising third means for

establishing bi-directional media stream (col. 9 lines 24-25) over said computer data

computer network (figure 1, reference 16) between any one of said plurality of

telephone means (col. 7 lines 43-47).

One skilled in the art would have recognized said software means comprising

third means for establishing bi-directional media stream over said computer data

computer network between any one of said plurality of telephone means, and would

have applied Murai's operation in Deng's operational step by TCI 11. Therefore, it would

have been obvious to one of ordinary skill in the art at the time of the invention, to use

Murai's computer network system with telephone function in Deng's single-wiring

network for integrated voice and data communications with the motivation being provide

the case where a call is originated to the telephone set 14a connected to the ISDN

extension line from any of the computer terminals connected to the LANs 42a and 42b,

and audio communication is performed there between (col. 7 lines 43-47).

For claim 35, Deng discloses single-wiring network for integrated voice and data

communications comprising:

a plurality of telephone means (figure 1, references 17, 18 and 19, col. 2 lines 21-

22);

software means for said computer data network (figure 1, reference 18 and 19),

said software means comprising first means for performing the functions of a private

branch exchange (PBX) (figure 1, reference 12) for said plurality of telephone means

(figure 1, reference 17, 18 and 19) that are connected to the computer data network

(col. 4 line 57 to col. 5 line 7);

said software means comprising second means for receiving requests for service

over said computer data computer network for any of said plurality of telephones means

(figure 1, references 17, 18 and 19)(col. 3 lines 58-60).

However, Deng does not expressly disclose said software means comprising

third means for establishing bi-directional media streams over said computer data

computer network between any two of said telephone means upon receiving a request

over said computer data network for calling one of said plurality of telephone means

from another of said plurality of telephone means. In an analogous art, Murai discloses

said software means comprising third means for establishing bi-directional media

streams (col. 9 lines 24-25) over said computer data computer network (figure 1,

reference 16) between any two of said telephone means upon receiving a request over

said computer data network for calling one of said plurality of telephone means from

another of said plurality of telephone means (col. 7 lines 43-47).

One skilled in the art would have recognized said software means comprising

third means for establishing bi-directional media streams over said computer data

computer network between any two of said telephone means upon receiving a request

over said computer data network for calling one of said plurality of telephone means

from another of said plurality of telephone means, and would have applied Murai's

operation in Deng's operational step by TCI 11. Therefore, it would have been obvious

to one of ordinary skill in the art at the time of the invention, to use Murai's computer

network system with telephone function in Deng's single-wiring network for integrated

voice and data communications with the motivation being provide the case where a call

is originated to the telephone set 14a connected to the ISDN extension line from any of

the computer terminals connected to the LANs 42a and 42b, and audio communication

is performed there between (col. 7 lines 43-47).

6.   Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Deng (US 5,862,134) in view of Henley et al. (US 5,526,353).

For claims 36 and 37, Deng discloses single-wiring network for integrated voice

and data communications comprising:

a software means performing the functions of a private branch exchange (figure 1, reference 12) running on at least one computer (figure 1, references 18 and 19) operatively coupled to said computer data network (col. 4 line 57 to col. 5 line 7);

a PSTN interface (figure 1, reference 11) means for coupling the computer data network to a public switched telephone network (figure 1, reference 14) (col. 2 lines 40-46);

a plurality of telephone means (figure 1, references 17, 18 and 19, col. 2 lines 21-22);

telephone interface means for coupling said plurality of telephone means to said computer data network (figure 1, reference 11, col. 2 lines 60-62).

However, Deng does not expressly disclose said telephone interface means converting analog signals into digital data for transmission over said computer data network; and

software means for controlling the signaling between said plurality of telephone means and said network, whereby said computer data network acts as a switch for connecting any of said telephone means to a called party.

In an analogous art, Henley et al. disclose said telephone interface means (figure 2, reference 240) converting analog signals into digital data for transmission over said computer data network (col. 9 lines 65-67); and

software means for controlling the signaling between said plurality of telephone means (figure 1, references 110, 112, 114, 162 and 164) and said network (figure 1, reference 100, col. 8 line 28-29), whereby said computer data network acts as a switch

for connecting any of said telephone means to a called party (figure 1, reference 140,

col. 8 lines 30-33 and col. 8 lines 41-42).

Henley et al. disclose wherein said computer network is one of a: asynchronous

transfer mode (ATM), Ethernet, or Internet Protocol (IP) network (col. 8 line 42 as set

forth in claim 37).

One skilled in the art would have recognized said telephone interface means

converting analog signals into digital data for transmission over said computer data

network, and would have applied Henley et al.'s Ethernet-type computer network

backbone 130 in Deng's operational step by TCI 11. Therefore, it would have been

obvious to one of ordinary skill in the art at the time of the invention, to use Henley et

al.'s system and method for communication of audio data over a packet-based network

in Deng's single-wiring network for integrated voice and data communications with the

motivation being to provide the analog-to-digital and digital-to-analog conversion for the

audio data (col. 9 lines 66-67).

7.   Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Deng

(US 5,862,134) in view of Murai (US 6,208,639) further in view of Andersen et al. (US

5,674,003).

For claim 38, Deng discloses single-wiring network for integrated voice and data

communications comprising:

(a) coupling a plurality of telephones (figure 1, references 17, 18 and 19, col. 2

lines 21-22) to the computer data network for digital data transmission over the

computer data network (col. 2 lines 21-27 and col. 2 lines 60-62);

(b) using the computer data network as a PBX (figure 1, reference 12) for switching between the plurality of telephones (figure 1, references 18 and 19) for making call between at least one of the telephones and the public switched telephone network (PSTN) (figure 1, reference 14) (figure 3, reference steps 301 and 302, col. 3 lines 58-63).

However, Deng does not expressly disclose using the computer data network as a PBX for switching between the plurality of telephones for making call from one telephone to another of the plurality of telephones. In an analogous art, Murai discloses using the computer data network as a PBX for switching between the plurality of telephones for making call from one telephone to another of the plurality of telephones (col. 7 lines 43-47).

One skilled in the art would have recognized the using the computer data network as a PBX for switching between the plurality of telephones for making call from one telephone to another of the plurality of telephones, and would have applied Murai's operation in Deng's operational step by TCI 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Murai's computer network system with telephone function in Deng's single-wiring network for integrated voice and data communications with the motivation being to provide the case where a call is originated to the telephone set 14a connected to the ISDN extension line from any of the computer terminals connected to the LANs 42a and 42b, and audio communication is performed there between (col. 7 lines 43-47).

However, Deng in view of Murai does not expressly disclose:

(c) said step (b) comprising assigning priority to the audio signals from the

plurality of telephones. In an analogous art, Andersen et al. disclose assigning priority to

the audio signals from the plurality of telephones (col. 15 lines 57-58).

One skilled in the art would have recognized the assigning priority to the audio

signals from the plurality of telephones, and would have applied Andersen et al.'s

telephony connection in Deng's operational step by TCI 11. Therefore, it would have

been obvious to one of ordinary skill in the art at the time of the invention, to use

Andersen et al.'s mechanisms for accessing unique features of telephony networks from

a protocol-independent data transport interface in Deng's single-wiring network for

integrated voice and data communications with the motivation being to establish the

telephony connection (col. 15 line 8).

8.   Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Deng

(US 5,862,134) in view of Murai (US 6,208,639) and Andersen et al. (US 5,674,003)

further in view of Henley et al. (US 5,526,353).

For claim 39, Deng in view of Murai and Andersen et al. does not expressly

disclose wherein said step (a) comprises connecting the plurality of telephones to one of

a: asynchronous transfer mode (ATM) network, Ethernet network, or Internet Protocol

(IP) network.

In an analogous art, Henley et al. disclose wherein said step (a) comprises

connecting the plurality of telephones to one of a: asynchronous transfer mode (ATM)

network, Ethernet network, or Internet Protocol (IP) network (col. 8 line 42).

One skilled in the art would have recognized said step (a) comprises connecting

the plurality of telephones to one of a: asynchronous transfer mode (ATM) network,

Ethernet network, or Internet Protocol (IP) network, and would have applied Henley et

al.'s Ethernet-type computer network backbone 130 in Deng's operational step by TCI

11. Therefore, it would have been obvious to one of ordinary skill in the art at the time of

the invention, to use Henley et al.'s system and method for communication of audio

data over a packet-based network in Deng's single-wiring network for integrated voice

and data communications with the motivation being to provide an Ethernet-type

computer network backbone 130 (col. 8 line 34).

Allowable Subject Matter

9.   Claims 23-30 and 32 are allowed.

Regarding claim 23, the prior art fails to teach a combination of the steps of:

a control processor that receives said outputs from said digital signal processor

indicative of detected events, and wherein said control processor outputs control

messages over said data network to a call manager program installed on said data

network, wherein said control messages are indicative of said events detected by said

digital signal processor, and further wherein said control processor is also coupled to

said synchronous-to-asynchronous converter for outputting asynchronous media

streams over said data network via said second connection, in the specific combination

as recited in the claim.

Response to Arguments

10.   Applicant's arguments with respect to claims 23-30 and 32-39 have been considered but are moot in view of the new ground(s) of rejection.

11.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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